Asphalt Sampling Report
Spokane Public Schools District 81
Spokane, Washington

Project Number 00098.1

July 15, 2000

FULCRUM

ENVIRONMENTAL CONSULTING, INC.

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Project Number 00098.1

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Prepared For: Joe Madsen, Safety & Risk Management Director
Spokane Public Schools District 81
200 N. Bernard
Spokane, WA 99201

Prepared By: Fulcrum Environmental Consulting, Inc.
Carnegie Square
107 South Cedar
Spokane, WA 99204

Authored By: DTA for Kelly De Caro **Date:** 7-15-00

Kelly L. De Caro
Environmental Scientist

Reviewed By: _____ **Date:** 7-15-00

Donald J. Hurst, RPG
President, Fulcrum Environmental Consulting, Inc.

Introduction

In the final draft of the Spokane Public Schools' PCB Remediation Plan dated May 15, 2000 accepted by EPA, the Spokane Public Schools (SPS) commits to sampling of asphalt at the hazardous waste storage locker at SPS's Maintenance Facility located at 2815 E. Garland Ave. Sampling of the asphalt was performed in the immediate vicinity of the hazardous materials storage locker where the PCB remediation waste is stored. The sample location is consistent with the area of concern indicated by EPA inspection and confirmed by a subsequent telephone conversation. Under the SPS Remediation Plan, additional sampling of subasphalt and/or remediation will be performed if indicated by the results of analysis.

Another area of the SPS Maintenance Facility was voluntarily sampled by SPS due to the possibility of contamination from previous storage of PCBs. These samples were taken at the Maintenance Facility near the storage shed where SPS employees indicated PCBs may have been stored in the past. Samples were also taken in the path of drainage to the nearest drywell as well as the lip of the drywell. Another sample was taken in the area where SPS is considering using for storage in the future.

Summary

Applicable regulatory protocol and obligation of the approved Remedition Plan were met during sampling, analysis, and reporting presented here in. All sample results document PCB concentrations below the EPA cleanup standard of 1 ppm PCBs as specified in the final draft of the SPS Remediation Plan. No further action is indicated.

Sampling Procedures

Kelly De Caro of Fulcrum Environmental Consulting located by grid and performed the sampling on June 29, 2000, in accordance with 40 CFR 761.283 and 761.286. The following is the procedure used to extract asphalt for each of the three samples obtained from the hazardous materials storage locker location. Figure 1 shows the location of each sample.

1. A stainless steel chisel was used to break the asphalt into pieces.

2. Latex gloves were used to pick up the pieces of asphalt and place them in sterilized glass jars provided by the analytical laboratory.

3. The latex gloves were removed and disposed of in a ZipLock freezer bag.

4. Nitrile gloves were then used while decontaminating the chisel with a scrub brush and a water and Liquinox mixture in a 5-gallon bucket.

5. After the chisel was cleaned, it was double rinsed with distilled water. Rinse water was collected in another 5-gallon bucket.

These steps were repeated for each sample and after the last sample was completed the Nitrile gloves were disposed of with the latex gloves. The excess distilled water from one 5-gallon bucket was poured into the water and Liquinox mixture bucket. The empty bucket was then decontaminated with distilled water. The ZipLock freezer bag containing the gloves was placed in the bucket with the water and Lliquinox mixture. The bucket was sealed with a lid and temporarily stored in the SPS Maintenance Facility hazardous materials storage locker pending disposal as PCB waste.

The glass jars containing the samples were placed in a chilled cooler provided by the analytical laboratory. Under chain of custody the samples were transported directly to the analytical laboratory.

Results of Analysis

The samples of asphalt were taken to Anatek Labs, Inc. in Spokane, WA. The lab used EPA Method 8082 to analyze the samples for PCBs. The Practical Quantitation Limit (PQL) for this analysis is 0.5 mg/kg (ppm). Copies of the lab analysis, chain of custody, and the Department of Ecology lab certification are included with this report.

Samples In Vicinity of Hazardous Materials Storage Locker

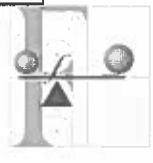
Samples 1 through 3 were taken under obligation of the SPS Remediation Plan. No PCBs were detected at the PQL (< 0.5 ppm) in any of these samples.

Sample Number	Location	Results (mg/kg)
1	Centered at the south edge of the locker.	None Detected
2	Near the northwest corner of the locker.	None Detected
3	Near the northeast corner of the locker.	None Detected

Voluntary Samples

These samples were not taken under obligation of the SPS Remediation Plan. Samples A-1 and A-2 were taken in the area where PCBs may have been previously stored. A-3 was taken in the drainage path to the nearest drywell and A-4 was taken on the lip of the drywell. A-5 was taken in an area where SPS is considering as a location for future storage. All analysis documents PCB concentrations below the EPA cleanup standard of 1 ppm PCBs. Sample A-2 was analyzed as containing 0.7 mg/kg (ppm) of PCBs.

Sample Number	Location	Results (mg/kg)
A-1	South of corner of chain link fence of storage shed.	None Detected
A-2	East of corner of chain link fence of storage shed.	0.7
A-3	Halfway between storage shed and drywell.	None Detected
A-4	Lip of drywell.	None Detected
A-5	In the middle of the east area of the storage shed.	None Detected



Conclusions

On the basis of sampling and analysis for PCBs in selected areas of the Maintenance Facility at 2815 E. Garland, no further action is warranted. SPS obligations for investigation of PCB storage areas at the Maintenance Facility as outlined in the Remediation Plan have been met.

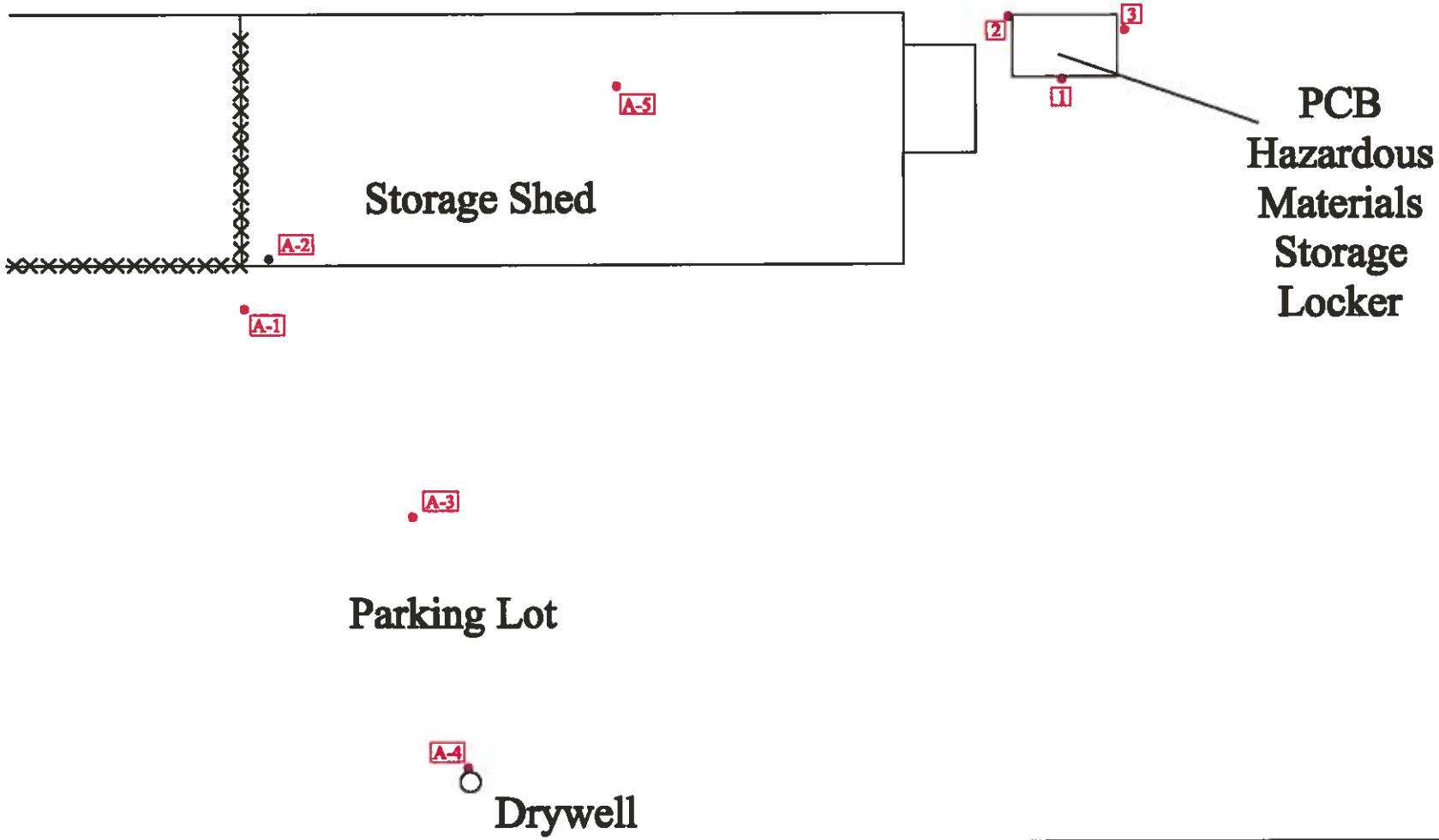


FIGURE 1: Sampling Locations

LEGEND

Sample Locations

Chain Link Fence

FULCRUM ENVIRONMENTAL CONSULTING, INC.
107 SOUTH CEDAR STREET
SPOKANE, WASHINGTON 99204
(509) 459-9220

Map By: KLD
Date: July 11, 2000
Project Number: 00098.1
Project: Spokane Public Schools

Spokane Public Schools
Maintenance Facility
2815 E. Garland Ave.

Anatek Labs, Inc.

Chain of Custody Record

1282 Alturas Drive, Moscow ID 83843 (208) 883-2839 FAX 882-9246
504 E Sprague Ste D, Spokane WA 99202 (509) 838-3999 FAX 838-4433

Anatek Log-In # 0062907

Company Name: Fulcrum Environmental	Project Manager: Kelly DeCaro
Address: 107 S. Cedar	Project Name & #: SPS : 0098.1
City: Spokane State: WA Zip: 99204	Purchase Order #:
Phone: (509) 459-9220	Sampler Signature: Kelly DeCaro
Fax: 459-9219	Shipped Via/Other:

Turn Around Time & Reporting

- [ ] Next Day*
- [ ] 2nd Day*
- [x] Normal

Results needed by: [ ] Phone [ ] Mail [ ] Fax

*Please call to verify rush charges before submitting samples

Provide Sample Description

Asphalt

List Analyses Requested

Note Special Instructions/Comments

please analyze for PCBs not chlorides

Lab ID	Sample Identification	Sampling Date/Time	Matrix	Preservative	# of Containers	Sample Volume	PCB
	1	6/29/00 10:30	Asphalt				
	2	6/29/00 10:30	Asphalt				
	3	6/29/00 10:30	Asphalt				

A 1
A 2
A 3
A 4
A 5

	Printed Name	Signature	Company	Date	Time
Relinquished by	Kelly DeCaro	Kelly DeCaro	Fulcrum	6/29	11:20
Received by	Kathy Sattler	Kathy Sattler	Anatek Labs	6-29-00	1119
Relinquished by					
Received by					
Relinquished by					
Received by					

Lab Use Only

Received Intact? YES NO
Labels & Chain Agree? YES NO
Containers Sealed? YES NO
Describe:

Anatek Labs, Inc.

1282 Alturas • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email anatekid@moscow.com
504 E Sprague Ste. D • Spokane, WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email anatekwa@moscow.co

FULCRUM ENVIRONMENTAL
KELLY DE CARO
S. 107 CEDAR
SPOKANE WA 99204

Project: SPS: 0098.1

Certificate of Analysis

PCB's Method EPA 8082

Sample:	1
Collect Date:	6/29/00
Lab Sample #:	0062907-01
Date Analyzed:	7/6/00
Date Extracted:	6/30/00
Surrogate(DCB) % Recovery:	99.8
Percent Solids:	99.9

Analyte	Result	Units	PQL
PCB 1242	ND	mg/Kg	0.5
PCB 1254	ND	mg/Kg	0.5
PCB 1232	ND	mg/Kg	0.5
PCB 1260	ND	mg/Kg	0.5
PCB 1248	ND	mg/Kg	0.5
PCB 1016	ND	mg/Kg	0.5
PCB 1221	ND	mg/Kg	0.5

Sample:	2
Collect Date:	6/29/00
Lab Sample #:	0062907-02
Date Analyzed:	7/6/00
Date Extracted:	6/30/00
Surrogate(DCB) % Recovery:	91.0
Percent Solids:	99.7

Analyte	Result	Units	PQL
PCB 1242	ND	mg/Kg	0.5
PCB 1254	ND	mg/Kg	0.5
PCB 1232	ND	mg/Kg	0.5
PCB 1260	ND	mg/Kg	0.5
PCB 1248	ND	mg/Kg	0.5
PCB 1016	ND	mg/Kg	0.5
PCB 1221	ND	mg/Kg	0.5

Sample:	3
Collect Date:	6/29/00
Lab Sample #:	0062907-03
Date Analyzed:	7/6/00
Date Extracted:	6/30/00
Surrogate(DCB) % Recovery:	88.6
Percent Solids:	99.8

Analyte	Result	Units	PQL
PCB 1242	ND	mg/Kg	0.5
PCB 1254	ND	mg/Kg	0.5
PCB 1232	ND	mg/Kg	0.5
PCB 1260	ND	mg/Kg	0.5
PCB 1248	ND	mg/Kg	0.5
PCB 1016	ND	mg/Kg	0.5
PCB 1221	ND	mg/Kg	0.5

Kelley Koopsen
Laboratory Supervisor

7/7/00

Anatek Labs, Inc.

Chain of Custody Record

1282 Alturas Drive, Moscow ID 83843 (208) 883-2839 FAX 882-9246
504 E Sprague Ste D, Spokane WA 99202 (509) 838-3999 FAX 838-4433

Anatek Log-In # 0062908

Company Name: Fulcrum Environmental	Project Manager: Kelly DeCaro
Address: 107 S. Cedar	Project Name & #: SPS : 0098.1
City: Spokane State: WA Zip: 99204	Purchase Order #:
Phone: (509) 459-9220	Sampler Signature: Kelly DeCaro
Fax: 459-9219	Shipped Via/Other:

Turn Around Time & Reporting

- [ ] Next Day*
- [ ] 2nd Day*
- [x] Normal

Results needed by: [ ] Phone [ ] Mail [ ] Fax

*Please call to verify rush charges before submitting samples

Provide Sample Description

Asphalt

List Analyses Requested

Note Special Instructions/Comments

please analyze for PCBs not just chlorides

Lab ID	Sample Identification	Sampling Date/Time	Matrix	# of Containers	Sample Volume	Preservative:	PCBs
	A - 1	6/29/00 10:45	Asphalt				
	A - 2	6/29/00 10:45					
	A - 3	6/29/00 10:45					
	A - 4	6/29/00 10:50					
	A - 5	6/29/00 10:50					

	Printed Name	Signature	Company	Date	Time
Relinquished by	Kelly DeCaro	Kelly DeCaro	Fulcrum	6/29	11:20
Received by	Kathy Sattler	Kathy Sattler	Anatek labs	6-29-00	1119
Relinquished by					
Received by					
Relinquished by					
Received by					

Lab Use Only

Received Intact? YES NO
Labels & Chain Agree? YES NO
Containers Sealed? YES NO
Describe

Anatek Labs, Inc.

1282 Alturas • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email anatekid@moscow.com
504 E Sprague Ste. D • Spokane, WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email anatekwa@moscow.co

FULCRUM ENVIRONMENTAL
KELLY DE CARO
S. 107 CEDAR
SPOKANE WA 99204

Project: SPS: 0098.1

Certificate of Analysis

PCB's Method EPA 8082

Sample:	A-1
Collect Date:	6/29/00
Lab Sample #:	0062908-01
Date Analyzed:	7/6/00
Date Extracted:	6/30/00
Surrogate(DCB) % Recovery:	81.8
Percent Solids:	99.9

Analyte	Result	Units	PQL
PCB 1242	ND	mg/Kg	0.5
PCB 1254	ND	mg/Kg	0.5
PCB 1232	ND	mg/Kg	0.5
PCB 1260	ND	mg/Kg	0.5
PCB 1248	ND	mg/Kg	0.5
PCB 1016	ND	mg/Kg	0.5
PCB 1221	ND	mg/Kg	0.5

Sample:	A-2
Collect Date:	6/29/00
Lab Sample #:	0062908-02
Date Analyzed:	7/6/00
Date Extracted:	6/30/00
Surrogate(DCB) % Recovery:	81.7
Percent Solids:	99.8

Analyte	Result	Units	PQL
PCB 1242	0.7	mg/Kg	0.5
PCB 1254	ND	mg/Kg	0.5
PCB 1232	ND	mg/Kg	0.5
PCB 1260	ND	mg/Kg	0.5
PCB 1248	ND	mg/Kg	0.5
PCB 1016	ND	mg/Kg	0.5
PCB 1221	ND	mg/Kg	0.5

Sample:	A-3
Collect Date:	6/29/00
Lab Sample #:	0062908-03
Date Analyzed:	7/6/00
Date Extracted:	6/30/00
Surrogate(DCB) % Recovery:	84.6
Percent Solids:	99.9

Analyte	Result	Units	PQL
PCB 1242	ND	mg/Kg	0.5
PCB 1254	ND	mg/Kg	0.5
PCB 1232	ND	mg/Kg	0.5
PCB 1260	ND	mg/Kg	0.5
PCB 1248	ND	mg/Kg	0.5
PCB 1016	ND	mg/Kg	0.5
PCB 1221	ND	mg/Kg	0.5

Anatek Labs, Inc.

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FULCRUM ENVIRONMENTAL
KELLY DE CARO
S. 107 CEDAR
SPOKANE WA 99204

Project: SPS: 0098.1

Certificate of Analysis

PCB's Method EPA 8082

Sample:	A-4
Collect Date:	6/29/00
Lab Sample #:	0062908-04
Date Analyzed:	7/7/00
Date Extracted:	7/6/00
Surrogate(DCB) % Recovery:	84.9
Percent Solids:	99.8

Analyte	Result	Units	PQL
PCB 1242	ND	mg/Kg	0.5
PCB 1254	ND	mg/Kg	0.5
PCB 1232	ND	mg/Kg	0.5
PCB 1260	ND	mg/Kg	0.5
PCB 1248	ND	mg/Kg	0.5
PCB 1016	ND	mg/Kg	0.5
PCB 1221	ND	mg/Kg	0.5

Sample:	A-5
Collect Date:	6/29/00
Lab Sample #:	0062908-05
Date Analyzed:	7/6/00
Date Extracted:	6/30/00
Surrogate(DCB) % Recovery:	80.5
Percent Solids:	99.5

Analyte	Result	Units	PQL
PCB 1242	ND	mg/Kg	0.5
PCB 1254	ND	mg/Kg	0.5
PCB 1232	ND	mg/Kg	0.5
PCB 1260	ND	mg/Kg	0.5
PCB 1248	ND	mg/Kg	0.5
PCB 1016	ND	mg/Kg	0.5
PCB 1221	ND	mg/Kg	0.5

Kelly Kaper
Laboratory Supervisor 7/7/00

The State of Washington
Department of Ecology

This is to certify that

Anatek Labs, Incorporated
Spokane, Washington

has complied with provisions set forth in Chapter 173-50 WAC and is hereby recognized by the Department of Ecology as an **ACCREDITED LABORATORY** for the analytical parameters listed on the accompanying Scope of Accreditation. This certificate is effective on the **7th day of December 1999** and shall expire on the **20th day of July 2001.**

Witnessed under my hand this ~~25~~**th day of April 2000.**

Perry F. Brake, Chemist
Lab Accreditation Unit Supervisor

LAB ACCREDITATION NUMBER
C093